

LETTERS TO THE EDITOR.

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The Treatment of Cancer.

IN NATURE of December 20, 1906, I note an article (pp. 177-8) on "The Treatment of Cancer." As a scientific investigator, I must dispute the truth of the fact that I have any co-discoverer in this matter of the use of pancreatic ferments in the treatment of malignant growths. As, of course, you are well aware, all priority in scientific discovery depends upon publication. In the case of the medical man mentioned in the article there has never been any publication of scientific facts, and the reference to the comparative immunity of the small intestine from cancer has a very different scientific explanation from that given in the *British Medical Journal*, 1906, p. 715. The real reason is the very small extent of the original piece of gut, out of which, by growth within itself, the mammalian small intestine is developed. If the explanation given by this medical man were correct, the cœcum ought to be as immune from cancer as the lower end of the small intestine. This gentleman has never claimed to have discovered a cure, let alone the cure, for cancer. What he professes to have found is that the proteolytic ferment, trypsin, and not the diastatic one, amyllopsin, splits up glycogen. This is a very remarkable find to have made! Assuming a miracle to have happened when these unpublished experiments were made, and that trypsin *did* split up glycogen, it may be asked why he and his pharmacist adopted for use as an injection into human patients, from about the end of February last until recently, a decoction containing a small amount of practically pure trypsin, which had no action whatever upon glycogen?

The medical man who made this remarkable find, which will not stand the test of confirmation, himself writes in the pages of the *Medical Press* of December 19, 1906, as follows:—"Every medical man must deplore the frequent attempts which are made in the *Lay Press* to induce the public to believe that a cure for cancer has been discovered." This is clear enough. Against it I, a scientific man, now affirm not only that a cure has been found, but that my own work and discoveries have revealed the cure. For the evidences of the truth of this statement I will not refer to various microscopic preparations of tumours after treatment, removed by operation, at a *post-mortem*, or sloughed away, for these are the property of physicians in England and America, who will themselves publish their cases.

Instead, as the space at disposal is limited, I will refer to Prof. W. J. Morton's preliminary report in the *New York Medical Record*, December 8, 1906, to the other cases in course of publication there, and to the brief account of the Naples case of inoperable cancer of the tongue, which I hope to see published shortly in the pages of that medical journal. Six months after all treatment ceased the patient is alive, well, and free from cancer.

This is the sequel of the use of preparations of pancreatic enzymes, scientifically prepared, and employed by such able and distinguished physicians as Cavaliere Guarracino and Prof. Manzo. The cancer yielded to the chemical test. The reagent for this is not, as so many in this country have believed, including certain cancer researchers, a solution of glycerine and water, possibly containing a little trypsin, but it is a potent extract of pancreas-gland, prepared from the fresh gland direct, and containing all the enzymes.

The writer of an article in the *British Medical Journal* for December 15, 1906, p. 1736, who displays a close knowledge of the unpublished work of a research body, states that trypsin is among the substances condemned in the passage cited from the fourth annual report of the Imperial Cancer Research Fund. I have not used the term "trypsin treatment," for I agree with Prof. Poirier, of the French Cancer Research, that trypsin will destroy cancer, but not cure it. The preparations used must be

such as those manufactured by Messrs. Fairchild Bros. and Foster, and they must be employed in the way directed by a scientific investigator. If the statement be aimed at the course of treatment advised by me, a scientific man, and, as a chemical trade newspaper says, "not even a medical man," if this be the case, I now direct the attention of the scientific members of the executive of the Imperial Cancer Research Fund to its existence. I traverse it completely, and deny that it contains a vestige of truth. As I have produced evidences of its falsity, if it refer to the pancreatic treatment, I now call upon these scientific men to substantiate the truth of the point by the production of evidences, including a clear account of the means adopted to obtain a proper injection compound, or to retract and withdraw the assertion; for what happened in Naples has also occurred in New York, as well as in other places in this country, even in the neighbourhood of this city of Edinburgh. J. BEARD.

8 Barnton Terrace, Edinburgh, December 23, 1906.

WITH reference to the above letter, questions of priority are not involved in the article referred to. It may be that Dr. Shaw-Mackenzie's advocacy of the trypsin treatment of cancer was based on a misconception, but that he did independently evolve it seems clear to us, and this is all that was suggested in the article. His line of treatment is indicated in a letter to the *British Medical Journal*, May 27, 1905, p. 1183, and again in the same journal, January 27, 1906, p. 240; in the latter not only trypsin, but pancreatin and secretin are suggested. As regards the term "trypsin treatment," Dr. Beard, in an article in the *British Medical Journal* (January 20, 1906, p. 140), uses the phrases, "the length of time and number of injections of trypsin necessary to destroy the tumour," "trypsin is the substance which will destroy the cancer cell (Beard and Shaw-Mackenzie)," &c., and he moreover states, "the preparation of trypsin employed (Fairchild Bros. and Foster's) was that originally dispensed to Dr. Shaw-Mackenzie's prescription by Mr. F. W. Gamble," thus acknowledging Dr. Shaw-Mackenzie's work, and actually making use of the latter's preparation of trypsin! Accepting the details of the case of cancer of the tongue cured by pancreatic extract as correct, it is a remarkable one, but not unique. The writer knows a case of mammary cancer, diagnosed as such 4½ years ago by four doctors, and on which a London surgeon refused to operate, which after treatment with X-rays has atrophied, and the patient is well and in good health to-day, surely as remarkable a case! Lastly, with regard to the alleged cures of cancer obtained by Prof. Morton in America (to which reference was made in the article), these are summarised in the *British Medical Journal*, December 22, 1906, p. 1835. About thirty cases were treated, and the results claimed are cure in two cases, remarkable atrophy of the tumour in one, and arrest of disease in many. In one case the "cure" has lasted four months, in the other one month! It is absurd yet to speak of such cases as "cured"; careful surgeons allow a *three years' limit*! To claim that "the cure" for cancer has been found has at present nothing to substantiate it, and in our opinion Dr. Shaw-Mackenzie's position is far more scientific than Dr. Beard's. We believe that the pancreatic enzymes must be injected into the neighbourhood of the growth or used locally; how, then, could the secondary growths in internal organs, &c., be attacked? Until this can be done, no "cure" for cancer will have been obtained.

THE WRITER OF THE ARTICLE.

The American Gooseberry-mildew.

I GIVE below the facts concerning the outbreak in England of this disease.

This mildew, *Sphaerotheca mors-uvæ* (Schwein.), Berk.—known in America since 1834—has proved so destructive there as practically to prevent the cultivation of the European gooseberry on a commercial scale.¹ It was unrecorded in Europe until 1900, when it appeared in a few gardens in the north-east of Ireland. It has spread over

¹ See, for example, Year Book, U.S. Dept. Agric., 1899; also Bull. 114 161, N.Y. Agric. Exper. Stat.

the eastern half of Ireland, causing great damage.¹ The disease has broken out on the Continent, and assumed epidemic proportions, causing such devastation that drastic legislative measures are being employed. The evidence shows that the outbreaks have originated from gooseberry-plants imported from America.²

In October last I discovered the disease in an English nursery on standard gooseberries recently imported from the Continent, and later in commercial plantations in one of the chief gooseberry-growing districts of England. I have since been warning fruit growers, by means of lectures and otherwise, of the new danger. I have taken every step to impress on the Board of Agriculture the necessity for preventing further importation of diseased plants and for enforcing the destruction of all those already infected.

The Board, on being informed of the outbreaks, sent Mr. Massee to the infected districts. As the result of his visit, a series of statements throwing doubt on the foreign origin of the disease and its serious nature have been widely circulated in the Press. These, as coming from the mycologist to the Board of Agriculture, have caused many growers to relax, at this critical stage of the first outbreak, their efforts to stamp out the disease.

I am convinced that there is no scientific foundation for the statements referred to. I have suggested³ that the points at issue should be submitted to arbitration, for it is most important to fruit growers that no doubt should be allowed to remain on a matter which so affects their interests.

The Board has issued a circular warning growers of the serious nature of the disease; but it does not recognise that the disease is new to the country, and that legislation is necessary. Unless the Board takes stronger measures at once, and unless the effect of the statements made by Mr. Massee can in some way be counteracted, nothing can prevent the disease from spreading and causing losses of many thousands of pounds.

E. S. SALMON.

South-Eastern Agricultural College, Wye, Kent,
January 5.

Filter Presses.

WE shall shortly be compelled to purchase a filter press, and should be glad if you would give us information as to the best firms to approach in this matter.

THE "COOPER RESEARCH LABORATORY."

Water Lane, Watford, January 7.

[MANUFACTURERS of filter presses are invited to put themselves into communication with our correspondent.—
ED. NATURE.]

ARCHAEOLOGICAL DISCOVERIES IN TURKESTAN.

WE have referred already (*NATURE*, December 13, 1906, p. 155, and December 20, 1906, p. 180) to the archaeological expeditions of Dr. M. A. Stein and Dr. von Lecoq in Central Asia. News of Dr. Stein's second expedition, which has resulted in further finds of importance, has lately been received, and details of the discoveries of Dr. von Lecoq (foolishly described in a telegram from India as comparable with those of Layard and Rawlinson!) have been communicated by the discoverer to the Srinagar correspondent of the *Times of India*, quoted in the *Times* of January 3. From these it is evident that Dr. von Lecoq's discoveries are, as might have been expected, analogous to those of his forerunner, Dr. Stein, in imitation and emulation of whose work the Prussian expedition of Dr. von Lecoq was sent out. The MSS. documents found by Dr. von Lecoq are, with the exceptions noted below, of the same type and in the same languages as those found by Dr. Stein, and, further, Buddhist paintings of the kind

described by Dr. Lecoq as "the missing stepping-stone by which Indian art advanced across Asia to Japan" were first found by Dr. Stein.

This being said, however, we must note that Dr. von Lecoq's work was carried out in a different part of Turkestan from Dr. Stein's, in the vicinity of Turfan and Urumchi, as well as at Kucha and Kurla. It is therefore to be expected that the results of the Prussian expedition, while generally analogous to those of the Indian ones, will show peculiarities due to difference of geographical position, &c., and it may well be that Dr. von Lecoq has discovered objects of later date than any found by Dr. Stein. The documents which he has found are mostly of the same kind and in the same tongues as those found by Dr. Stein, but some are written in new, or rather little-known, languages, such as Tangut, Koh-Turki, Middle Persian written in the Manichæan alphabet, and a sort of Central Asian dialect of Syriac. Manuscripts in ordinary Syriac were found; these are, of course, monuments of the Christianising activity of the Nestorians in Central Asia from 600 A.D. to 1000 A.D. A curious discovery is thus described:—"The furious zeal of the Chinese conquerors of Turkestan against Buddhism was exemplified by the discovery of the packed bodies, still clad and odorous, of a multitude of Buddhist monks driven into a temple, and stifled there, more than a thousand years ago."

Dr. von Lecoq's colleague, Prof. Grünwedel, is still working in Turkestan. Already fifteen chests of MSS., and altogether about 200 cases of "finds," have been sent to Berlin. "The expedition up to date has cost the German Government 10,000l., a sum which may be contrasted with the 800l. spent on Dr. Stein's epoch-marking expedition of 1900-1 by the Indian Government." Comment upon this fact is superfluous, and would in any case be useless.

The current number of the *Geographical Journal* contains a letter from Dr. Stein, dated from Keriya on October 10, 1906, giving an account of his work up to date. Apart from his trigonometrical surveys of the Kuen-lun mountains and his archaeological re-examination of the Buddhist monument known as the Rawak Stupa (already mentioned in *NATURE*), Dr. Stein excavated a small ruined temple in "the extensive débris-strewn areas known collectively as the Tati of Hanguya." Here he found terracotta reliefs of the fifth to sixth century A.D., often covered with rich gilding. Dr. von Lecoq reports similar discoveries of gilt paintings. East of the Khotan oasis Dr. Stein excavated ruined shrines near the village-tract of Domoko; that of Khadalik yielded MSS. of the same date as those discovered by Dr. Stein previously at Dandan-Uiliq. In one were found stringed rolls of Chinese copper money, deposited by one of the last devotees before the storm of Tibetan conquest wrested the land from the Chinese. At the time of writing, Dr. Stein was proceeding from Keriya to the eastern sites beyond Niya.

AT THE BACK OF THE BLACK MAN'S MIND.¹

THERE can be no question as to the originality and value of this book as a contribution to West African ethnology. Mr. Dennett has lived many years amongst the Bavili and other tribes of the Kakongo district (Luango coast) immediately north of the Congo mouth. He has also of late lived as an official several years in the Benin district of the Niger Delta. About three-quarters of the book under

¹ Journ. Roy. Hort. Soc., vols. xxv.-vii., xxix. (1900-6).
² See Eriksson, *Zeitschr. f. Pflanzenkrankh.*, Bd. xvi.; also work of de Jacewski.

³ The *Times*, December 28, 1906.

¹ "At the Back of the Black Man's Mind; or, Notes on the Kingly Office in West Africa." By R. E. Dennett. Pp. xv+288. (London: Macmillan and Co., Ltd., 1906.) Price 10s. net.